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DATE MAILED: 03/31/2009

## NOTICE OF ALLOWANCE AND FEE(S) DUE

22850 7590 03/31/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA. VA 22314 EXAMINER

CARLSON, KAREN C

ART UNIT PAPER NUMBER

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,615	05/08/2006	Masatoshi Tohata	288704US0PCT	3587

TITLE OF INVENTION: RECOMBINANT MICROORGANISM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	d below or directed oth	or transmitting the ISS ing the Patent, advance of nerwise in Block 1, by (	a) specifying a new corres	pondence address;	and/or (	b) indicating a sepa	hould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDE	ENCE ADDRESS (Note: Use BI	ock 1 for any change of address)	Feef	<li>s) Transmittal. Thi</li>	s certifica	ate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must
22850	7590 03/31	/2009	have				
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							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORN	NEY DOCKET NO.	CONFIRMATION NO.
10/578,615	05/08/2006	•	Masatoshi Tohata		288	704USOPCT	3587
TITLE OF INVENTION							
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	06/30/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
CARLSON,	KAREN C	1656	435-252300				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA ess an assignee is ident n in 37 CFR 3.11. Comp	mge of Correspondence  "Indication form and. Use of a Customer  A TO BE PRINTED ON	2. For printing on the p (1) the names of a put or agents OR, alternativ (2) the name of a significant 2 registered patient of the present of a transport insted, no name will be THE PATENT (print or typ data will appear on the p TT a substitute for filing an (B) RESIDENCE: (CTTY)	3 registered paten ely, e firm (having as a gent) and the name neys or agents. If o printed. e)	member es of up t no name	a 2to to is 3	ocument has been filed for
Please check the appropri	ate assignee category or	categories (will not be p	rinted on the patent):	Individual 🚨 Co	orporation	or other private gro	oup entity Government
4a. The following fee(s) a  ☐ Issue Fee ☐ Publication Fee (N ☐ Advance Order - #	o small entity discount p		b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	Form PTO-2038     authorized to char	is attach	ed. juired fee(s), any de	
	SMALL ENTITY state	as. See 37 CFR 1.27.	☐ b. Applicant is no long	ger claiming SMAI	LENTI	I'Y status. Sec 37 Cl	FR 1.27(g)(2).
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req ecords of the United Sta	uired) will not be accepte tes Patent and Trademarl	ed from anyone other than the Office.	ne applicant; a regi	stered att	orney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration N			
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	EFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est a depending upon the indiv the Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 r idual case. Any co r, U.S. Patent and THIS ADDRESS	he public minutes to mments o Tradema 5. SEND	which is to file (and o complete, including on the amount of tirk Office, U.S. Depa TO: Commissioner	I by the USPTO to process) ig gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/578,615	05/08/2006	Masatoshi Tohata	288704US0PCT 3587			
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OBLON, SPIVA	K, MCCLELLAND	CARLSON, KAREN C				
1940 DUKE STREET			ART UNIT	PAPER NUMBER		
ALEXANDRIA,	VA 22314	1656				

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 195 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 195 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/578,615 TOHATA ET AL. Notice of Allowability Examiner Art Unit Karen Cochrane Carlson 1656 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the After-final amendment filed February 20, 2009, The allowed claim(s) is/are 1-13,16,20-28,31,35-43,46,50 and 51. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🛛 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. T Examiner's Statement of Reasons for Allowance of Biological Material Other .

Application/Control Number: 10/578,615

Art Unit: 1656

This Notice of Allowability is in response to the After-final amendment filed February 20, 2009.

Claims 1-13, 16, 20-28, 31, 35-43, 46, 50, and 51 are currently pending.

An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephen G. Baxter on March 16, 2009.

### Examiner's Amendments to the Claims:

Please amend Claims 20, 21, 35, 36, 50, and 51 as follows:

- 20. (Currently Amended) The recombinant microorganism as claimed in claim 1, wherein said hydrolase heterologous protein is an  $\alpha$ -amylase.
- 21. (Currently Amended) The recombinant microorganism as claimed in claim 1, wherein said hydrolase <u>heterologous protein</u> is a protease.
- 35. (Currently Amended) The recombinant microorganism as claimed in claim 33  $^{22}$ , wherein said hydrolase heterologous protein is an  $\alpha$ -amylase.
- 36. (Currently Amended) The recombinant microorganism as claimed in claim 33
  22. wherein said hydrolase heterologous protein is a protease.
- 50. (Currently Amended) The recombinant microorganism as claimed in claim 48 37, wherein said hydrolase heterologous protein is an  $\alpha$ -amylase.

Application/Control Number: 10/578,615

Art Unit: 1656

51. (Currently Amended) The recombinant microorganism as claimed in claim 48 37, wherein said hydrolase heterologous protein is a protease.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Cochrane Carlson whose telephone number is 571-272-0946. The examiner can normally be reached on 7:00 AM - 4:00 PM, off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karen Cochrane Carlson/ Primary Examiner, Art Unit 1656